16m
Pi

PIONEER SOUNDPROOF* DOORS

PIONEER

FIREPROOF DOOR CORP. MOUNT VERNON, NEW YORK

*including the only soundproof louvre door made

SOUND INSULATING DOORS AS MANUFACTURED BY PIONEER FIREPROOF DOOR CORPORATION PROVIDE THE NECESSARY SOUND INSULATION OR ATTENUATION REQUIRED IN ARCHITECTURAL ACOUSTICAL WORK.

In the past, a certified sound insulating door meant a thick, cumbersome, unsightly door. Pioneer, calling upon its quarter of a century of experience, has perfected a hollow metal, 1¾" thick sound insulating door certified for 42 db. average attenuation. This new, highly efficient hollow metal sound insulating door is equal in architectural appearance to the hollow metal doors furnished by Pioneer in hundreds of outstanding projects, among which are the Air Force Academy in Denver, Colorado and the White House in Washington, D.C.

Pioneer sound insulating doors were tested in a nationally recognized laboratory in accordance with recommended practices of American Society of Testing Materials' E90-55. Pioneer sound insulating doors were tested as hung in a conventional door opening with normal clearances at top, sides and bottom. No precautions were taken to seal these joints except for features inherent in the door and stop design. This fact is important, for many doors are tested completely sealed in an opening; obviously this latter type of test is not conclusive for a door that has to be opened and closed.

Pioneer sound insulating door is an economical and practical answer to architectural sound transmission problems. These sound insulating doors achieve maximum sound attenuation at minimum cost. Pioneer sound insulating door can be used in Music Practice Rooms, Executive Offices, Conference Rooms, Medical and Hospital Areas, Control Rooms, Mechanical Equipment Rooms, etc.

SPECIFICATIONS: "Where indicated on drawings, furnish Pioneer's standard sound insulating door assemblies having certified sound transmission loss test from a recognized laboratory, indicating a minimum average sound transmission loss of 42.5 decibels. The transmission loss average shall consist of a simple arithmetic average of 11 discrete frequencies from 125 to 4000 cps and shall be based upon tests of the doors, using a simulated operating installation with normal clearances around the perimeter of the door. Written certification must be furnished."

SOUND INSULATING DOORS

The Pioneer sound insulating door is uniquely designed with opposite faces of the door isolated from each other by means of a non-structural separator. Specially selected dampening agents are inserted inside the door creating a sound barrier with negligible natural frequency effect over the audible range.

These 1¾" doors are supplied with specially made neoprene rubber gasketing around the opening perimeter. Gasketing is adjustable. Pioneer includes a self-activating adjustable sealing mechanism, which insures a pressure seal at the bottom of the door.

Pioneer sound insulating doors may be used to provide a sound barrier in partitions having sound transmission loss equivalent to a 6" masonry block wall.

Pioneer sound insulating doors are equal in every respect to the architectural hollow metal doors for which Pioneer Fireproof Door Corporation is known. Combined with the special sound reduction techniques, these doors embody such quality construction features as continuous automatic heli-arc welding on the edges of the door. The face and edge of these doors are seamless.

FRAMES

All frames are fabricated in accordance with Pioneer's specifications for custom hollow metal work. All profiles as shown in Pioneer's Sweet's Catalog No. 16b/Pi are available for use with sound retardant doors.

Frames are formed of 12, 14 and 16 gauge prime quality cold rolled steel sheets. Profiles to be press brake formed, true and sharp.

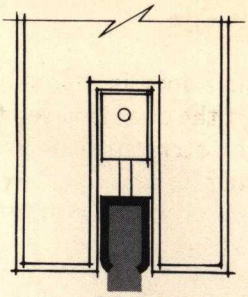
Head and jambs to be assembled with tongue and slot arrangements; mitres accurately fitted, fully welded and ground smooth.

Three anchors per jamb to suit wall conditions.

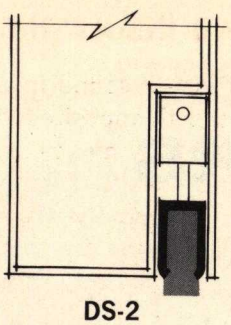
Frames to be accurately reinforced, mortised, drilled and tapped for template hardware. Reinforcements to be provided for surface hardware.

All frames to be given a prime coat of special Pioneer rust resistant metallic primer.

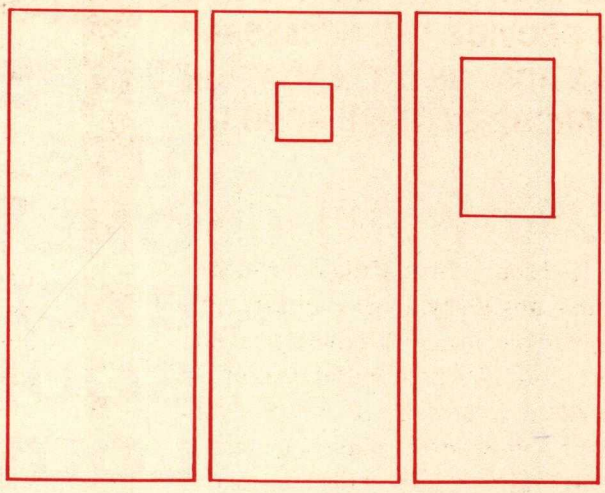
See the Pioneer insert, 16b/Pi, for specifications and details on their full line of hollow metal doors and frames.

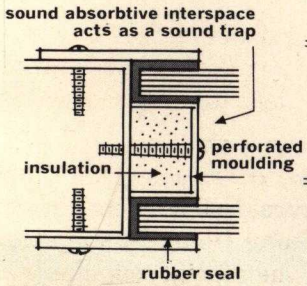


DS-1
Standard Automatic
Door Bottom

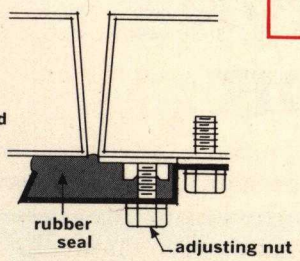


DS-2
Special Automatic
Door Bottom
with Kick Plate



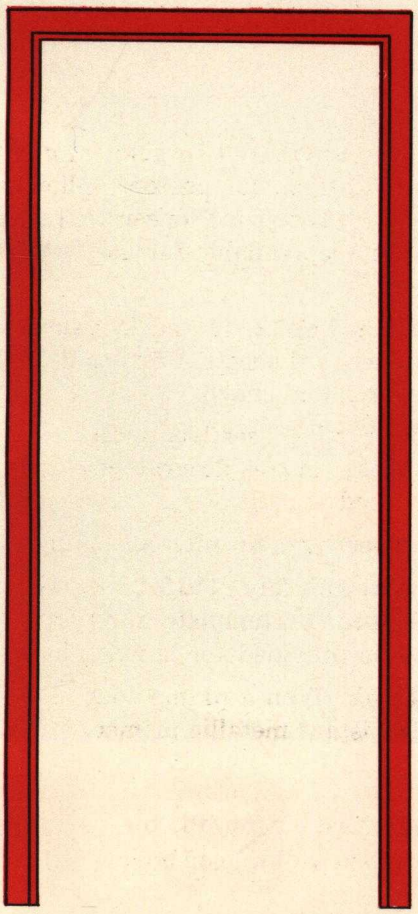


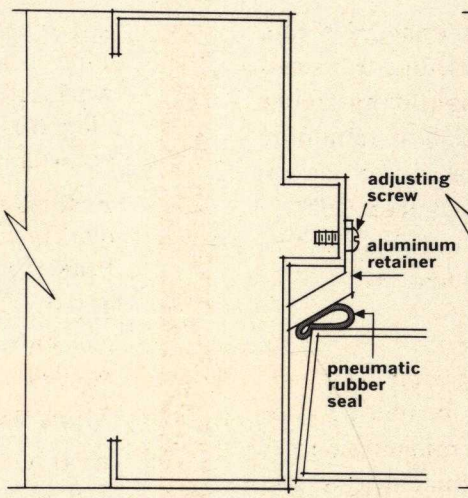
Section through
Glass Moulding



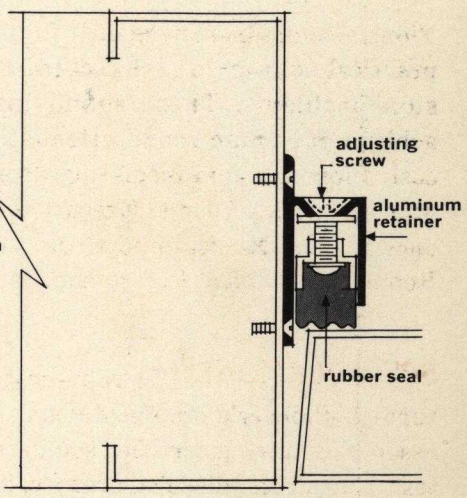
Section through
Adjustable Astragal

See Last Page
For Details on
Pioneer's
Exclusive
Soundproof
Louvre Door



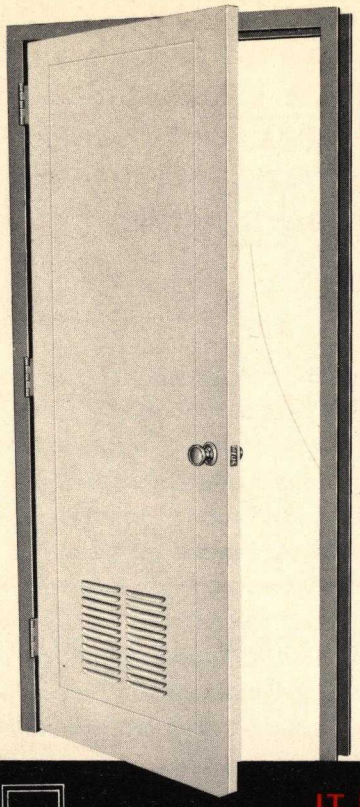


SR-A
Standard Economy Series



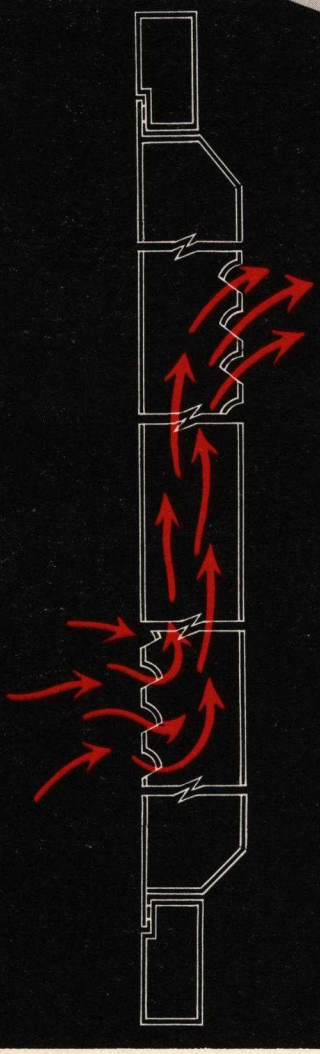
SR-B
Special Series

Pioneer Fireproof Door Corporation



PIONEER OFFERS THE ONLY EXCLUSIVE SOUNDPROOF* LOUVRE DOOR

The first truly sound insulating louvre door ever manufactured



IT IS NOW POSSIBLE TO MOVE AIR THROUGH A DOOR LOUVRE WITHOUT THE ANNOYING TRANSFER OF NOISE AND CRITICAL LOSS OF SPEECH PRIVACY.

For many years there has been a vital need for a door louvre which would have sound insulating qualities. Pioneer Fireproof Door Corporation is now producing the first and only rated sound insulating louvre door. The louvre is incorporated into Pioneer's custom high quality hollow metal doors. These doors are particularly suitable in air conditioned rooms, where privacy of speech and exclusion of noise is desirable while free air flow is essential. Pioneer's sound insulating louvre door eliminates the need for sound trapped transfer ducts or wall louvres, thereby eliminating both additional costs and broken wall surfaces.

This door was tested in a nationally recognized laboratory and has a certified sound transmission loss of 32 decibels.

SPECIFICATIONS: "Where indicated on drawings, furnish Pioneer's standard sound insulating louvre door assemblies having certified sound transmission loss test indicating a minimum average sound transmission loss of 32 decibels. Written certification from a recognized laboratory must be furnished."

*PATENT PENDING

Pressure Drop Data for Sound Insulating Louvre Door

AIRFLOW C.F.M.	PRESSURE DROP INCHES — WATER
1100	1.35
550	.34
275	.09
140	.02

PIONEER

FIREPROOF DOOR CORP. MOUNT VERNON, NEW YORK

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